

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 3 AND MD 424 /CONWAY ROAD IN ANNE ARUNDEL COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A WESTBOUND MD 424 TRIPLE LEFT TURN AND WILL CONSIST OF THE REPLACEMENT OF A STRAIN POLE, DETECTION, AND SIGNAL HEADS. MD 3 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

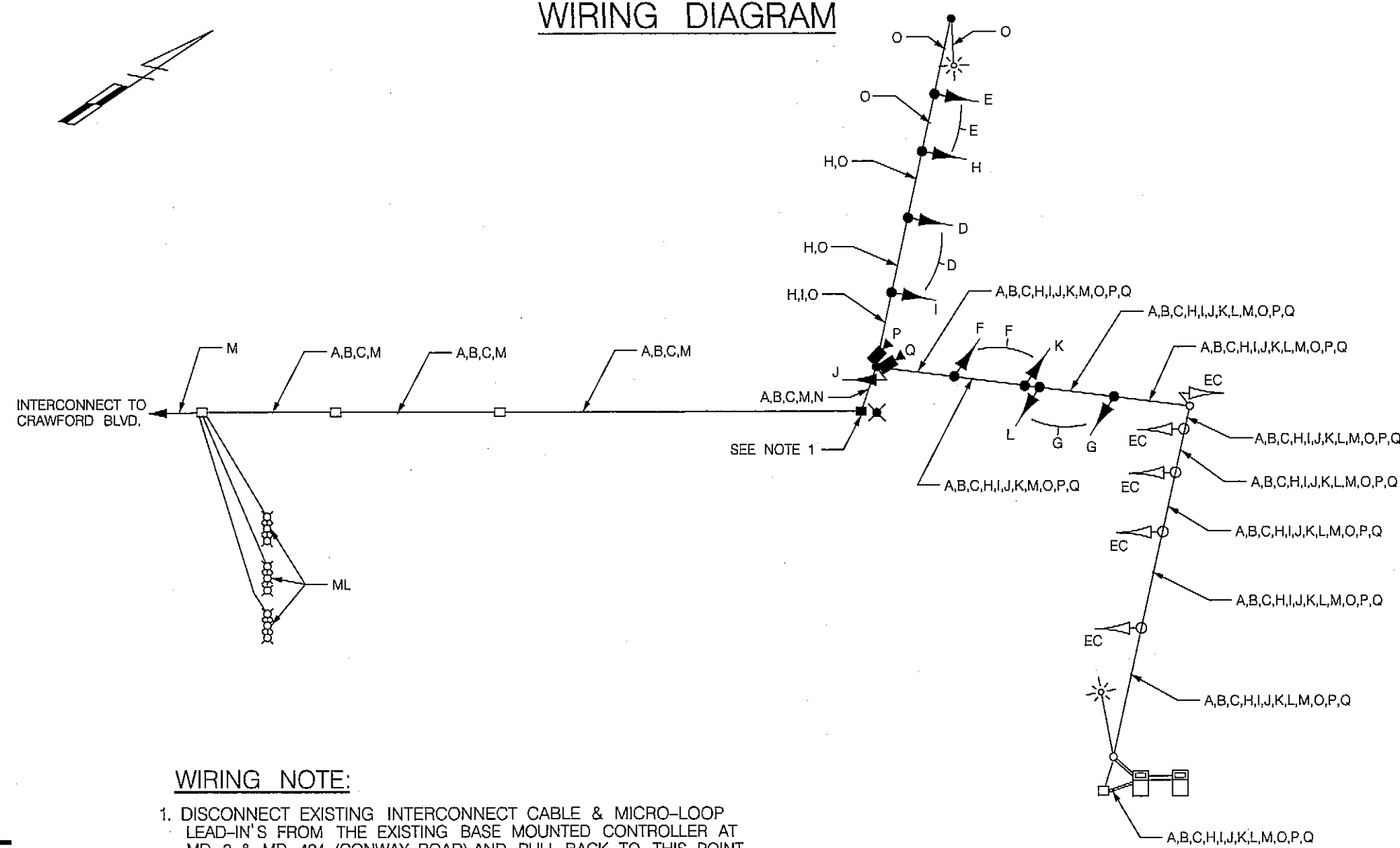
INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULLY-TRAFFIC-ACTUATED MODE WITH LEAD /LAG EXCLUSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 3 AND SIDE STREET SPLIT PHASING. THIS OPERATION WILL NOT CHANGE.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED.

WIRING DIAGRAM



WIRING NOTE:

1. DISCONNECT EXISTING INTERCONNECT CABLE & MICRO-LOOP LEAD-IN'S FROM THE EXISTING BASE MOUNTED CONTROLLER AT MD 3 & MD 424 (CONWAY ROAD) AND PULL BACK TO THIS POINT, THEN RE-INSTALL THRU PROPOSED CONDUIT, AND SPAN WIRE TO THE EXISTING BASE MOUNTED CONTROLLER CABINET.

WIRING KEY

A-C	EXISTING MICRO-LOOP PROBE LEAD-IN
D-G	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
H-L	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
M	EXISTING 12-PAIR VOICE GRADE INTERCONNECT CABLE
N	EXISTING 12-PAIR STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
O	2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
P-Q	VIDEO DETECTION CABLE
ML	MICRO-LOOP PROBE
X	GROUND ROD
EC	EXISTING CABLE

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
1 LS	MAINTENANCE OF TRAFFIC
1 CY	TEST PIT EXCAVATION
2100 LF	5 INCH HEAT APPLIED WHITE OR YELLOW THERMOPLASTIC PAVEMENT MARKING
600 LF	10 IN. HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
100 LF	24 IN. WHITE HEAT APPLIED WHITE THERMOPLASTIC PAVEMENT MARKINGS
9 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
4 EA	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTERS
1 LS	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT
2 EA	RELOCATE EXISTING VIDEO DETECTION CAMERA
2100 LF	DISCONNECT, PULL BACK AND REROUTE CABLE
15 LF	3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
20 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
110 LF	ELECTRICAL CABLE 5 - CONDUCTOR (NO 14 AWG)
1825 LF	ELECTRICAL CABLE 7 - CONDUCTOR (NO 14 AWG)
450 LF	ELECTRICAL CABLE 2 - CONDUCTOR (NO 12 AWG)
300 LF	STEEL SPAN WIRE - 1/4 IN DIAMETER
300 LF	STEEL SPAN WIRE - 3/8 IN DIAMETER
5 CY	CONCRETE FOR SIGNAL FOUNDATION
1 EA	GROUND ROD - 3/4" X 10'
1 EA	14 IN. X 32 FT. 2-PLY STEEL STRAIN POLE
1 EA	R3-SR SIGN (30" x 36") - SPAN WIRE MOUNT
1 EA	R3-6L SIGN (30" x 36") - SPAN WIRE MOUNT
5 EA	R3-6L SIGN (30" x 36") - SPAN WIRE MOUNT
1 EA	RELOCATE EXISTING SIGN
32 EA	12 IN. L.E.D. SIGNAL HEAD SECTION
2 EA	TEMPORARY BACK - GUY
2 EA	RELOCATE EXISTING GROUND MOUNTED SIGN
1 EA	ELECTRIC HANDHOLE
775 LF	VIDEO DETECTION CABLE
1 EA	R4-7 SIGN (24" x 30") - GROUND MOUNT
1 EA	R3-7(L) SIGN (30" x 30") - GROUND MOUNT
1 EA	R3-8(MOD) SIGN (60" x 30") - GROUND MOUNT
1 EA	R3-8(MOD) SIGN (64" x 30") - GROUND MOUNT
100 LF	REMOVE EXISTING PAVEMENT MARKING LINE
75 LF	4 IN. X 4 IN. WOOD SIGN SUPPORTS

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 5 ARE AS FOLLOWS:

MRS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 841-1003

MR. JOE GECKLE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 841-1002

MR. MIKE HUBER
UTILITY ENGINEER
(410) 841-1005

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
MANAGER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MR. MIKE STOCKER
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
MANAGER - SIGNAL OPERATIONS SECTION
(410) 787-7652

PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 2 + 5	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 2 + 6	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
2 + 6 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 1 + 6	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
FLASHING OPERATION	FLR	FLR	FLR	FLY	FLY	FLY	FLR	FLR	FLR	FLY	FLY	FLY	FLR	FLR	FLR	FLR

TRAFFIC CONCEPTS, INC.

325 Gambrills Road
Suite B
Gambrills, MD 21054
(410) 923-7101
FAX: (410) 923-6473

EMAIL: K.SCHMID@TRAFFIC-CONCEPTS.COM

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 2203, EXPIRATION DATE: 6/15/2025



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 3 AND MD 424 /CONWAY ROAD
CROFTON, MARYLAND

GENERAL INFORMATION PLAN

SCALE NONE DATE 3-27-13 CONTRACT NO. BW996M82

DESIGNED BY T. ZAYDEL COUNTY ANNE ARUNDEL
DRAWN BY T. ZAYDEL LOGMILE 02000302.21
CHECKED BY K. SCHMID T.I.M.S. NO. J-448
F.A.P. NO. NA TOD NO.

DRAWING NO. TS-160 LGI SHEET NO. 3 OF 3